

Energy Efficiency Programme for Small and Medium Enterprises (SMEs)



Bureau of Energy Efficiency



India's MSME Sector: Context

✧ **MSME Sector Contribution to Indian Economy**

- 45% of Industrial Production
- 35% share in exports
- >8000 Products

✧ **Second largest sector after agriculture**

- >26 million units
- Provides employment to >59 millions

✧ **Accelerates the growth of Economy**

- MSME growth higher than GDP & Industrial growth

✧ **Energy Consumption was 50.5 Mtoe in 2012**

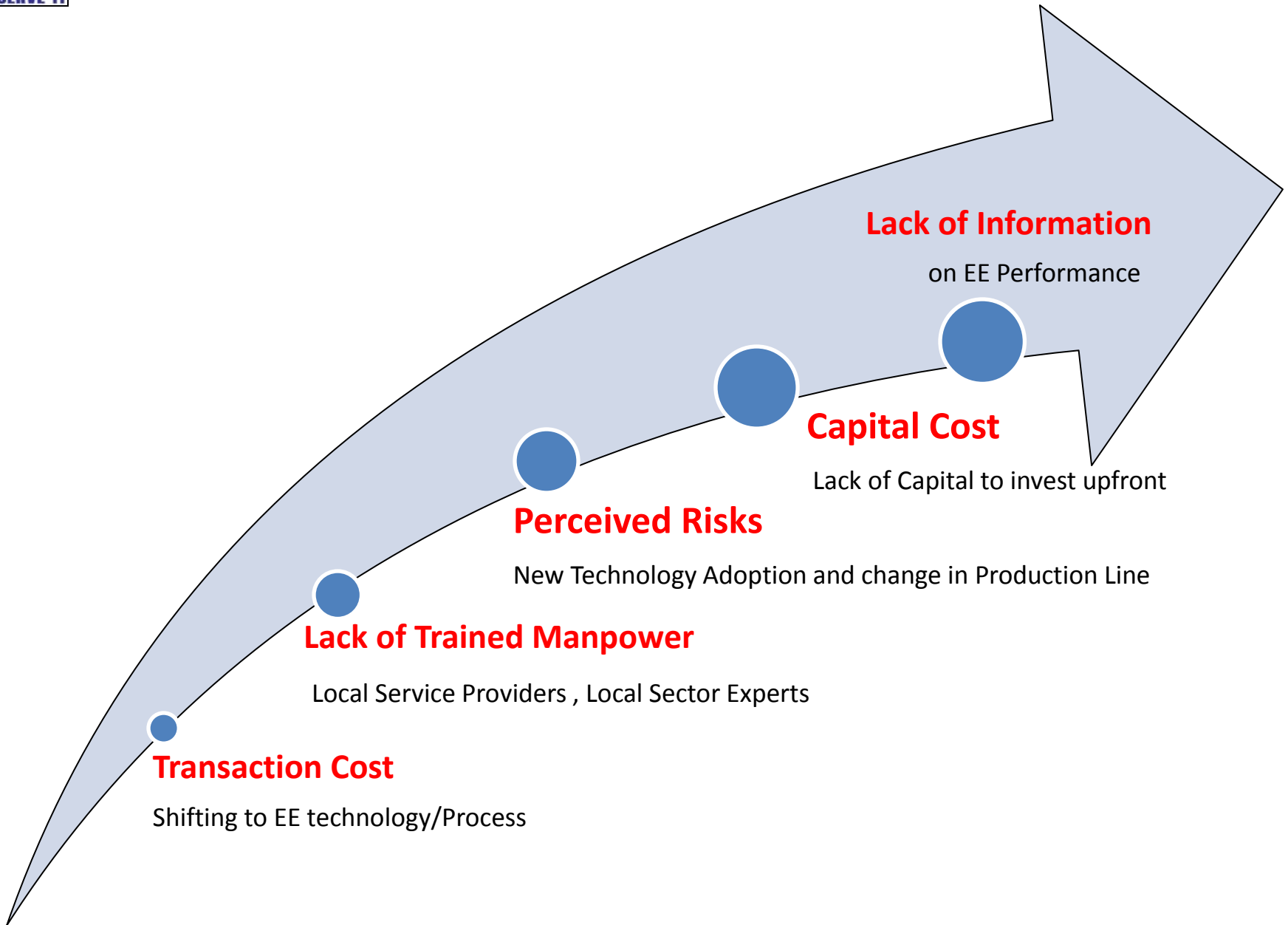
- Energy saving potential of 15%
- Expected growth rate is > 6%

- ✓ Very small in size (majority are MSME units)
- ✓ Majority of units are proprietorship / family owned concern
- ✓ Very limited professional management
- ✓ Obsolete technology/ production process
- ✓ Low capital investment & labour intensive
- ✓ High energy consumption in many sectors
- ✓ Lack of Knowledge about energy efficient production options / technology

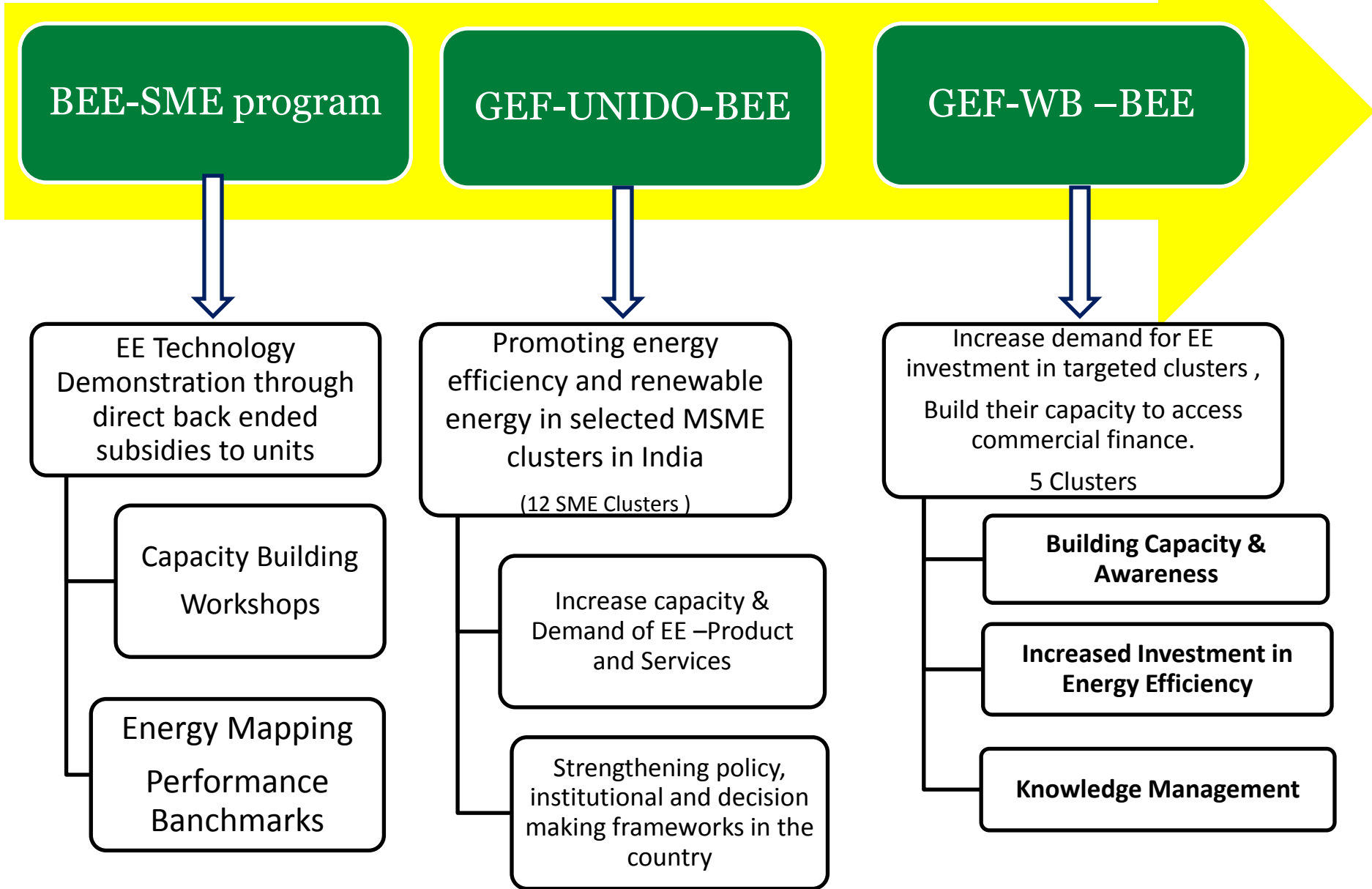
SME– Achievements (XI Plan)

- Situation analysis completed in selected 35 SME clusters.
- 25 SMEs clusters (18 Sector Type) undertaken for further interventions .
- Comprehensive energy audit and technology gap assessment completed in 1250 SME Units belonging to 25 SMEs clusters.
- 375 DPRs on energy efficient technologies prepared and peer-reviewed.
- Cluster specific manuals on energy conservation prepared for 25 clusters and 5 Awareness workshops organized
- Implementation of Small Group Activities focused on improving energy efficiency in 9 units of 3 clusters with the help of ECCJ, Japan.
- Capacity building of Local Service Providers/Technology Providers in 25 SMEs clusters.
- Energy saving potential of 0.66 MTOE in 25 SMEs clusters which is 15% of the total energy consumption in these clusters.

Inherent Barriers



Current BEE initiatives in SME sector



1. Implementation of Technology demonstration projects

- ❖ Demonstration of 10 best identified technologies of selected 5 energy intensive sectors
- ❖ 100 technology demonstration projects to be implemented in 5 sectors .

2. Technical Assistance and Capacity Building

- ❖ Sharing of the BoP and BAT
- ❖ Development of case studies , print materials and audio visual of BATs& BOPs
- ❖ Capacity building in clusters through SDAs , National level workshops for stakeholders .

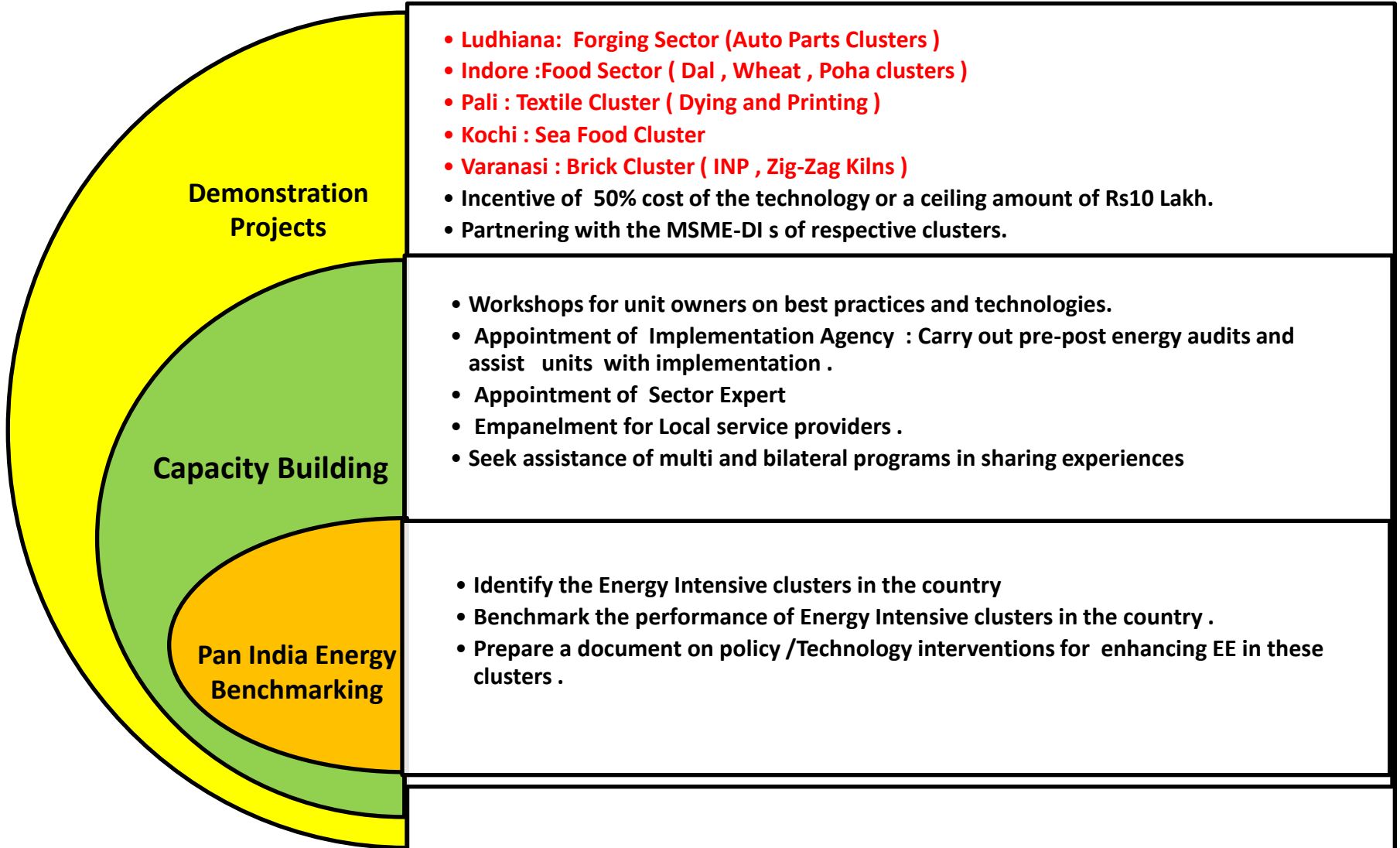
3. Mapping of the SMEs on pan India basis.

- ❖ Development of Pan India level Sector specific reports and policy plans .
- ❖ Launch of National Policy Document on Energy Efficiency in SMEs.

Synergies of BEE SME program MoMSME schemes in

1. There is a two member committee Chaired by AS and DC, MoMSME to explore ways of aligning the activities of BEE with those of MoMSME in the XII plan under its SME scheme.
2. AS &DC suggested BEE to target following clusters :
 - a. **Food (Indore) ,**
 - b. **Kochi (Seafood, Kerala)**
 - c. **Forging (Ludhiana, Punjab)**
 - d. **Brick (Varanasi, UP)**
 - e. **Textile (Pali, Rajasthan)**
3. MSME-DI to support BEE in its SME initiatives and BEE to promote the TEQUP scheme in its workshops

BEE SME Program



Implementation Framework

Step .1

Constitution of cluster level steering committee

- a) Director, MSME-DI of the cluster,
- b) BEE is (convener)
- c) President, cluster Association

Shortlisting of units and oversee implementation of EE Demos

Step.2

Open invite for participation to SME units for the implementation of Demonstration projects

+

Invitation for empanelment of LSP and Technology Providers

Step. 5

Base line audits in the selected 20 units of the cluster by BEE- IA

Step.4

Signing of MoU with each of the twenty units of the cluster.

Step.3

Physical verification of units by BEE agency to select 20 units on the recommendation of committee

Step.6

1. Implement Demos in the 20 units.
2. Preparation of DPRs and audio visual recordings, Case

Step.7

Post Audits steering committee approves release of subsidy to units upon satisfaction of completion

Step. 8

Direct release of subsidy through e-transfer in the account of unit owner on the receipt of original bills from the units and proformas indicating completion of demos from IA .



Status of the BEE-SME scheme

- i. Implementing agencies appointed to support BEE-SME program in five clusters.
- ii. Inception workshops involving stakeholders from cluster associations, units, MSME, regional research and technical institutions and Local Service providers were conducted.
- iii. Baseline audits in selected units of Ludhiana and Varanasi cluster is completed and best energy efficiency technologies are identified for implementation.
- iv. Identification of beneficiary units under progress in Kochi (Seafood), Indore (food) and Pali (Textile) clusters.
- v. MoUs signed with units in **Varanasi Brick, Ludhiana Forging and Indore Food** Clusters
- vi. **Walk through audits** completed in **Ludhiana ,Pali, Indore & Kochi** clusters .
- vii. Envisaged to complete the implementation of technologies in **Varanasi (Brick cluster) and Ludhiana (Forging) by January 2016.**
- viii. Energy saving process Technologies identified in **Pali , Ludhiana and Indore** while as in Varanasi retrofitting of FCBTK with energy efficient Zig –Zag Kilns is proposed .

Promoting Energy Efficiency And Renewable energy in Selected MSME Clusters In India. Status

Objective

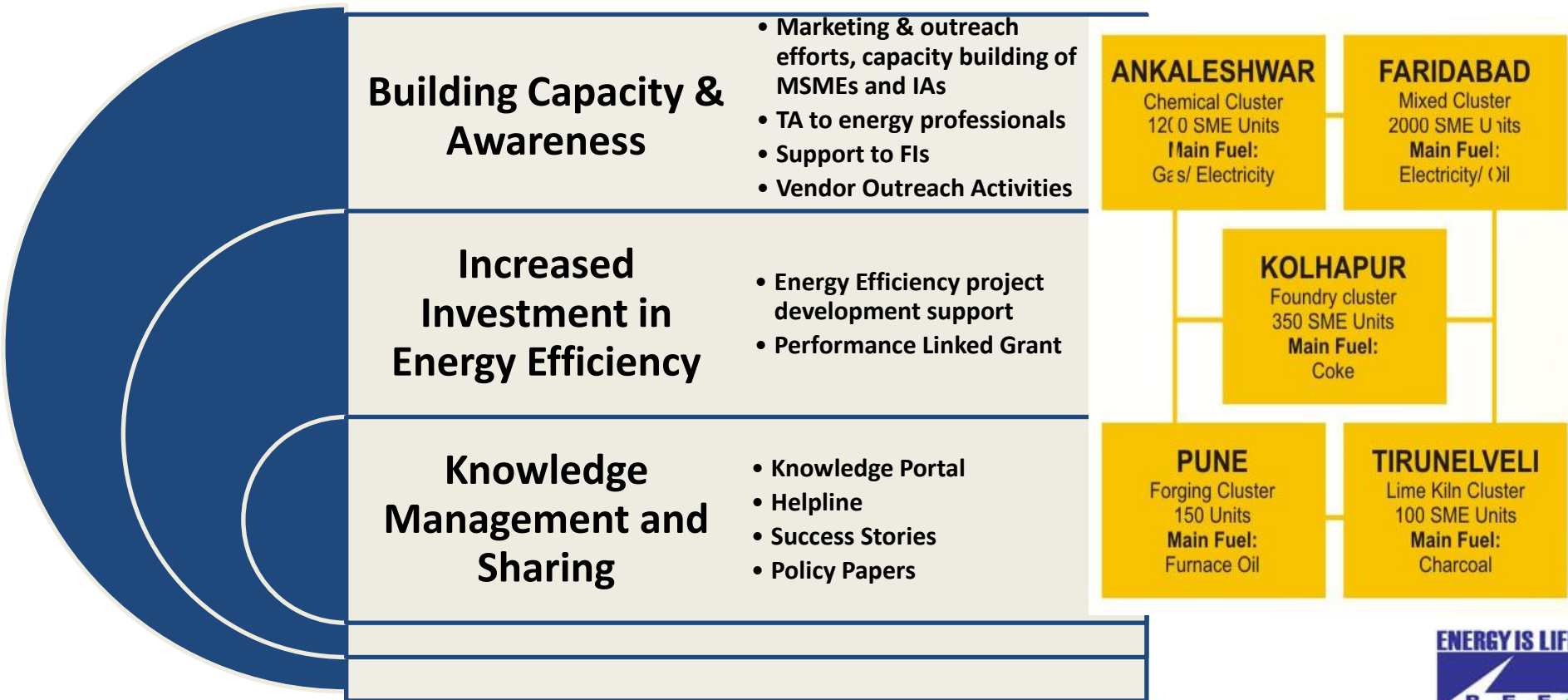
- ❖ The aim is to develop and promote an environment for introducing energy efficiencies and enhance use of renewable energy technologies in 12 selected MSME clusters in 5 sectors.

Progress Till date

1. Recruitment of 9 Cluster Leaders completed .
2. Completed energy audits and capacity building (through BoP & other dissemination activities) in 9 clusters
3. Collection of data through questionnaire survey in 9 clusters completed .
4. Preparation of 7 DPRs : 3 are under implementation in clusters while 3 are under assessment
 - Biomass gasifier for sand drying in sand re-claimant plant at Belgaum
 - Solar Boiler in Gujarat Dairy Cluster
 - APFC at Indore foundry cluster
5. Energy Information Collection & Analytics at Belgaum (16 units) and Coimbatore (17 units)
6. 11 small scale energy efficiency projects implemented by Cluster Leaders
7. Initiation of formation of panel to evaluate technology modification projects from 2 IITs and CGCRI Khurja.
8. Background work to develop the energy management centres at each cluster is under progress .
9. About 10 demonstration projects are intended to be implemented in the 2015-16

FINANCING ENERGY EFFICIENCY AT MSME

- ❖ The objective is to increase demand for energy efficiency investment in targeted MSME clusters and to build their capacity to access commercial finance.



Thank You